AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the:

LISTING OF CLAIMS:

1. (currently amended): A method for forming an oxynitride film, characterized by comprising providing a solid dielectric on at least one of opposed surfaces of a pair of electrodes opposed to each other under nearly atmospheric pressure, introducing a nitrogen gas containing oxygen or an oxide at higher than 1 ppm and equal to or lower than 0.2% into a space between the pair of opposed electrodes, applying an electric field to the nitrogen gas, and bringing the resulting plasma, in which an N_2 (H.I.R.) and/or N_2 (2^{nd} p.s.) active species appears dominantly as active nitrogen species observed by optical emission spectroscopy, into contact with an object to be processed to form an oxynitride film on a surface of the object to be processed.

2. (canceled).

3. (original): The method for forming an oxynitride film according to claim 1, characterized in that the nearly atmospheric pressure is equal to or higher than 300 Torr.

4. (canceled).

5. (canceled).

6. (previously presented): The method for forming an oxynitride film according to claim 1, characterized in that the gas atmosphere under nearly atmospheric pressure in which the plasma is obtained is a gas atmosphere in which emission of light derived from NO-γ is observed by optical emission spectroscopy.

7. (currently amended): The method for forming an oxynitride film according to claim 3, characterized in that the nearly atmospheric pressure is ~~more preferably~~ 500 to 800 Torr.

8. (canceled).

9. (canceled).

10. (currently amended): The method for forming an oxynitride film according to claim 1, characterized in that ~~only neutral active species is~~ the N_2 (2^{nd} p.s.) and/or N_2 (H.I.R.) active species is a neutral active species present in the plasma as active nitrogen species observed by optical emission spectroscopy.

11. (canceled).

12. (previously presented): The method for forming an oxynitride film according to claim 1, characterized in that the plasma is brought into contact with the object to be processed in a diffusion region outside the discharge space between the opposed electrodes.

13. (canceled).

14. (previously presented): The method for forming an oxynitride film according to claim 1, characterized in that the solid dielectric is a dielectric containing substantially no oxide.

15. (canceled).

16. (previously presented): The method for forming an oxynitride film according to claim 1, characterized in that the object to be processed has a surface temperature of 50°C or higher, more preferably 100°C or higher.

17. (canceled).

18. (canceled).

19. (currently amended): An oxynitride film formed on a surface of an object to be processed by applying an electric field to a nitrogen gas containing oxygen or an oxide at higher than 1 ppm and equal to or lower than 0.2%, and bringing the object to be processed into contact

with the resulting plasma in which an N_2 (H.I.R.) and/or N_2 (2^{nd} p.s.) active species appears dominantly.

20. (canceled)

21. (currently amended): A substrate having on its surface an oxynitride film formed by applying an electric field to a nitrogen gas containing oxygen or an oxide at higher than 1 ppm and equal to or lower than 0.2%, and bringing an object to be processed into contact with the resulting plasma in which an N_2 (H.I.R.) and/or N_2 (2^{nd} p.s.) active species appears dominantly.

Claims 22-26 (canceled)

27. (new): A method for forming an oxynitride film on a surface of an object to be processed, which comprises providing a plasma chamber having at least two gas inlets and a gas outlet and a pair of opposing electrodes arranged within said chamber including a solid dielectric present on at least one of the opposed electrode surfaces, introducing a nitrogen gas under nearly atmospheric pressure containing oxygen or an oxide in an amount higher than 1 ppm and equal to or lower than 0.2% into a space between the pair of opposed electrodes, at the same time introducing a second gas containing no oxygen or containing oxygen in an amount of 1 ppb or less into the chamber around the opposed electrodes, applying an electric field to the nitrogen gas introduced into the space between the opposed electrodes to generate a plasma, and contacting the object to be processed with the resulting plasma to form an oxynitride film on a surface of the object to be processed.

28. (new): The method for forming an oxynitride film according to claim 27, wherein the nitrogen gas introduced into the space between the pair of opposed electrodes contains oxygen or an oxide in an amount of 50 ppm or higher and equal to or lower than 0.2%.